

\$3.75

THIS BOOK BELONGS TO

PAUL ELIAS

98 RAYMOND ST.

CAMBRIDGE, MASSACHUSETTS,

CLASS OF

U.S.A.

Manuel Teraza
Sta. Cruz Barillas

Bill Veith
Sta. Cruz Barillas

Renán Tut ~~Tesucan~~ Tesucan
38 George st.

Bengue Viejo Del Carme
BELICE, BRIT. HOND.


HARVARD COOPERATIVE SOCIETY
CAMBRIDGE, MASS.

Gen. Am.

Lista de Correos

Santa Cruz Barillas

Huehuetenango, Guat.

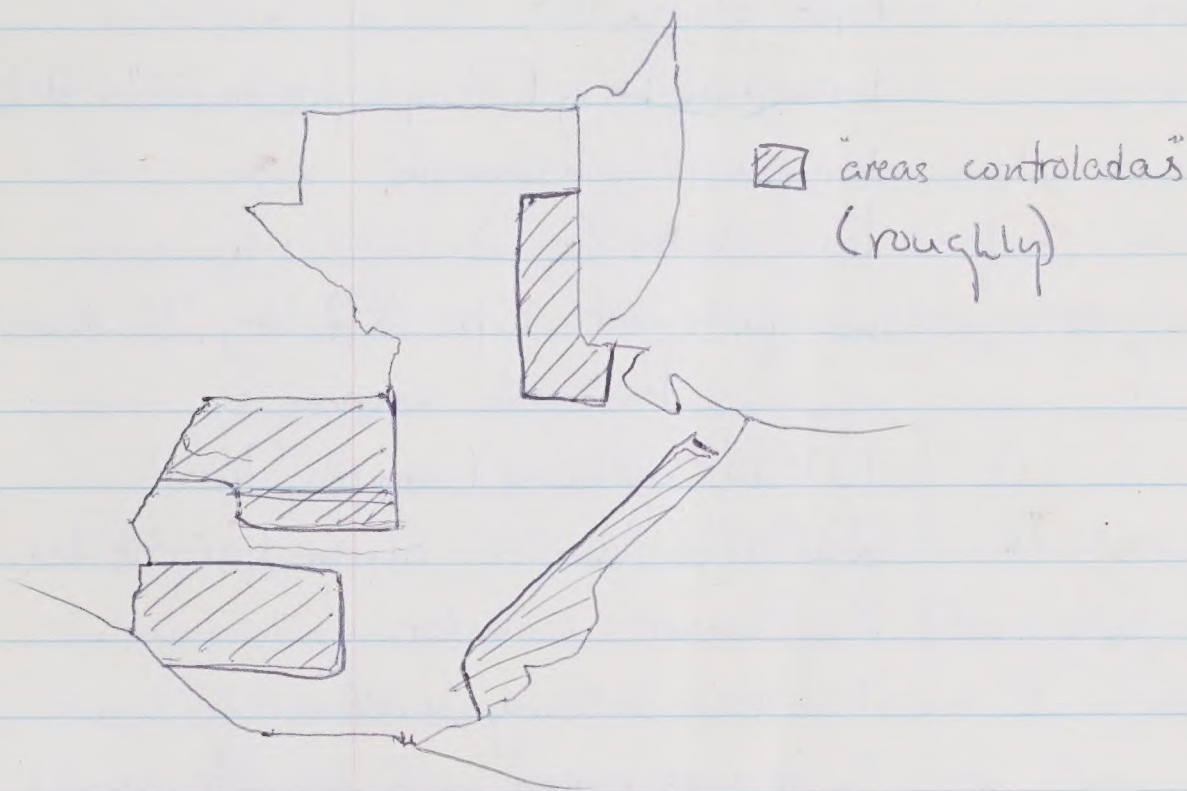


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Guatemala, Aug - Sept. 1974

Left Boston Thurs. Aug. 22 + flew via Miami to Guatemala city. Stayed with parents at lg. gaudy expensive (\$25.00/double) very American hotel "Camino Real" 23/ Went and bought numerous maps at "Instituto Geografico Nacional", unfortunately much of my collecting area is in a "controllada" area, maps for which cannot be released as they are guerrilla tools.



Went also to the Natl Hist. museum, a complete mess. Badly stuffed mammals, reptiles and amphibians dried for display or rotting and white in weak preservative. Picked up my pack which had been lost in transit at the airport.

+ Schlumberger thermo.
 firing tray
 camera(s)
 map tube(?) (plastic water proof)
 rapidograph(?)
 rag 3 hole field book

List of goods brought;

1 pr. hiking boots

more?

3 pr. pants (2 corduroy, 1 Lewis)

more?

4 shirts (2 T, 1 flannel, 1 wool)

3 pr. underwear

more

2 1/2 pr. socks ~~free~~ (white athletic)

1 poncho

1 sweatshirt

unnec.

1 pr. gloves

1 sleeping bag (very light, to 35° or 40°, fiberfill)

unnec.

1 nylon 10 oz. hammock

unnec.

1 pr. shorts (gym)

not crucial for camping
 tent prob. better

mosquito net tube 8 ft long, 3' diameter for
 hammock sleeping.

didn't use much, not

1) 150' goldline (roughly 7/16")

2) 50' 1/8-1/4" nylon line braided 550' test

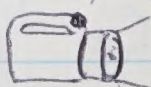
2 Jumar ascenders

1 steel locking carabiner

2 pieces nylon webbing for slings 1/7", 1/12"

1 sm. knapsack (nylon)

1 lg. camp trails pack w/ frame

1 lg. flashlight → 

1 pt. formalin

compass

1 spax/eng. dictionary

jackknife

1 stout short machete

preservation materials

1 sawed off potato rake.

many bromeliads, better, short
 length rope (25')

Sm. Gas lantern better

plenty for 200 animals

24/ Left Guatemala city and drove to Antigua. There mum + daddy went off sight-seeing just before lunch and I took the car and drove to Sta. María de Jesús, at the foot of Volcán de Agua. On the road I found my first local herp., a 5 ft. D.O.R. colubrid snake of some sort. It was flattened and unsavable but the pattern was visible and original head shape could be guessed at. It appear had a sort of ~~tan~~ non-descript brown pattern, smooth scales laterally keeled scales dorsally + light venter. Scale rows probably in the twenties, very similar to an Elaphe but perhaps somewhat heavier bodied than most. It was found at between 1,700 and 2,000 meters elevation. I tried collecting salamanders just below Sta Maria at about 1,980m there were many bromeliads and I opened several dozen but the ground was very dry and dusty and only the largest bromeliads ~~had~~ were wet inside, and all I found were invertebrates.

25/ Woke at seven, bought food at the market and drove to Sta. Maria de Jesús. ^(6,773' elev) ^{1 (2,000 m)}
 We parked the car in the plaza and walked in. Walked nearly to the crater (3760 meters) and back down (up 9:30 am - 2:30 pm, down 2:30 pm - 5:30 pm). No bromeliads seen above village, nor tree ferns at all. Rained most of the trip, and high up the earth was quite moist but no salamanders were found despite repeated digging at tree bases, in leaf litter, under moss, along roadcut banks etc. as well as dismantling many (8 or 10) decomposing logs, and peeling bark from standing deadwood (both of last mostly done in high ecosystem above 3,000^E meters of occasional pines and thick lush bunch grass). However on the trip back down we came upon a small viper in the process of eating some sort of *Thamnophis*, or trying to. We separated them and bagged them, the garter snake seeming very healthy ~~having~~ ^{he had} been gripped near the tail. We determined to pickle the young crotalid and keep the garter for at least one day to see the venomous effect. We had no trouble buying a needle and

syringe for thirty cents at an Antiguan
 Farmacia. We then drove to Guatemala
 City for the night. Before we left Sta.
 Maria we were told that the snake's viper's
 name was "cantil", and that they grew to
 at least 7 ft. This one does appear to be
 a baby as it retains indications of ~~the~~ the
 characteristic sulphur yellow tail tip of
 baby vipers. The snakes were found at 8:00 pm,
 in suprisingly cool weather, but not in the rain.

26/ Pickled the cantil, went to the
 main market in the city, where I ordered a
 wallet from a leather maker to hang around ~~to~~
 my neck, to be ready tomorrow 2.50. In the
 afternoon mum went to see "mcap" people
 and daddy & I went to the palacio nacional
 to see the ~~arg~~ archeological exhibit, as the
 archeological museum is being remodeled, and
 then to some small ruins outside town, and then
 to the beautiful cement raised contour map
 (11,000') of the country with green volcanoes
 6 ft. tall etc. built in 1909, amazing, it helped
 me understand where the escarpment is etc.,

~~27~~ Finally pickled the Thamnophis ~~which~~ whose wound was soft swollen and discolored, but nowhere near killing him after more than 24 hrs. I suppose the cantil's venom may help in predigestion, but they don't nearly immobilize a reptilian prey item. When they were found the cantil was trying ~~to~~ to swallow the Thamnophis apparently aware that his prey wasn't nearly dead. ✓

27/ I went to pick up my wallet while parents drove to Chimaltenango to see "mcap" people. The leathersmith hadn't showed by nine so I split and after much searching found a Chimalt. bus (\$10¢) and had a pleasant ride. Went up and found "Chichivac" locality at milestone 94 on the panamerican hiway just beyond Tecpan, looked for a few minutes in heavy rain without success, (I beleive because as I heard later the rains had just begun and perhaps the animals had not yet emerged) and left.

Aug 31 Ate breakfast at the pension,
bought bread + bananas + left (2:45).

The houses here are adobe with thatch or shingle
roofs. I stopped at one on my way out of
town to inquire about some skins hanging
outside. A woman was home and said \$2.00 for
one, they were tanned, and she called the animal
"gato del monte" they looked like coati from a
distance. I didn't have \$2.00 and I think she
was asking very high and was slightly embarrassed,
and she wouldn't come down, perhaps she wasn't sure
how low her husband wanted to sell. When passing
Indians on the road walking, apparently the greeting
consists of "buenos dias" followed immediately afterwards
by "Abon". Both can be abbreviated and one left
out, or sometimes a nod does. Another thing, at
the table, when one leaves one thanks everyone
else at the table "muchas gracias".

I finally flagged a bus and rode
to a likely looking locality in a high pine forest
between San Mateo Ixtatan and Santa Eulalia
(~~1/2 kilometer~~^{100 ft} beyond ~~stone #~~^{kilometer} ~~196~~¹⁹⁷, San Sebastian
Coatan turnoff is at # 132) which I believe is
the highest altitude that road reaches between those
towns. There were lots of salamanders of two ob-

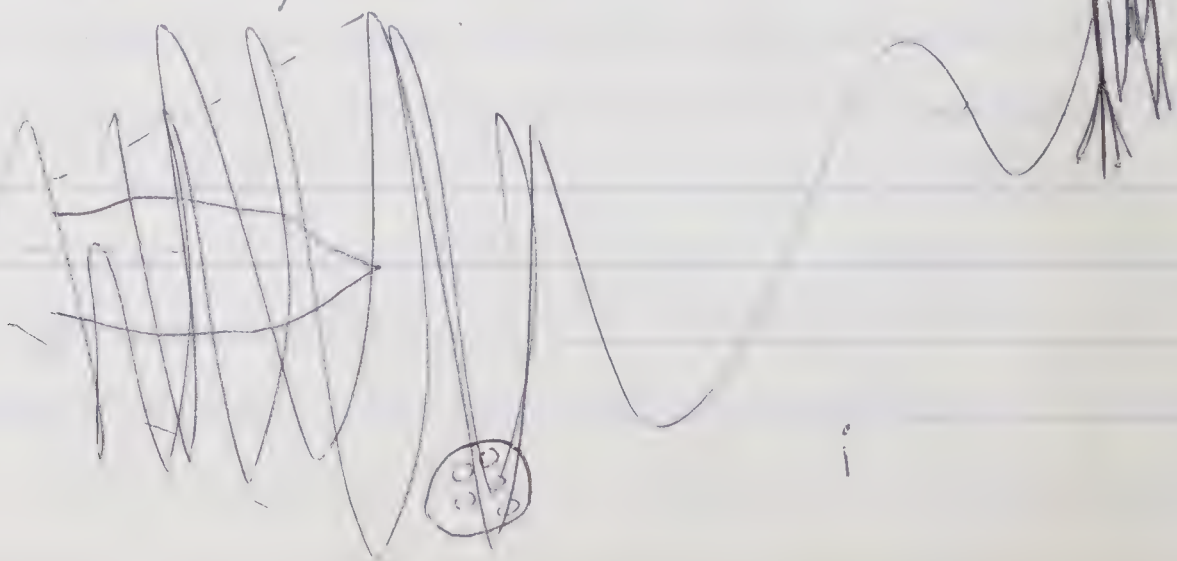
San Mateo 13 (205)

vious types (prob. species), plus snakes, toads
 and a Sceloporus-like grey lizard which
 I collected none of. The forest was almost
 exclusively pine except for occasional deciduous
 trees which were invariably covered with thick
 moss + ferns. There were fallen logs strewn
 everywhere, many of which appeared partially
 burnt. The ground was covered with thick
 sphagnum type moss, a tougher compacter moss,
 and low ($\frac{1}{4}$ "") leaved green plants. ~~There were~~
~~The ground was flat~~ All was covered with
 a top layer of pine needles. The ground was
 smooth in places, interrupted by rock outcroppings
 and low rocky hills. Salamanders were found
 under logs, under bark on logs, under bark on
 stumps, and inside rotten logs. Both types were
 found together in the second and third situations.
 Only the unstriped type was found in the first
 situation, and only the striped, web-footed type was
 found in the fourth. In the first situation only
 once were two salamanders found together under
 the same log, ~~on~~ a large and a small individual.
~~More commonly~~ All specimens were collected in an
 approximately 3 hr period and within a 200 ft. radius
 circle.

- 3-6/ under bark on pine stumps
 7-8/ together under bark on pine log.
 9-11/ " " " " "
 12-14/ together in cavity inside rotten log.
 15-17/ 2 found hiding under logs, 1 active
 18-42/ Under logs
 43-44/ Together under bark on stump
 45-52/ Under bark on logs, or w/in rotten logs.
 53/ Under log

Sept. 2 '74 Spent an hour in each of two localities in the mts above San Juan Ixcay (towards Huehuetenango) checking bromeliads, logs, leaf mold, stumps et al with no success, one place was high hardwood stuff, montane rain forest, the other lower and denser perhaps lumbered.

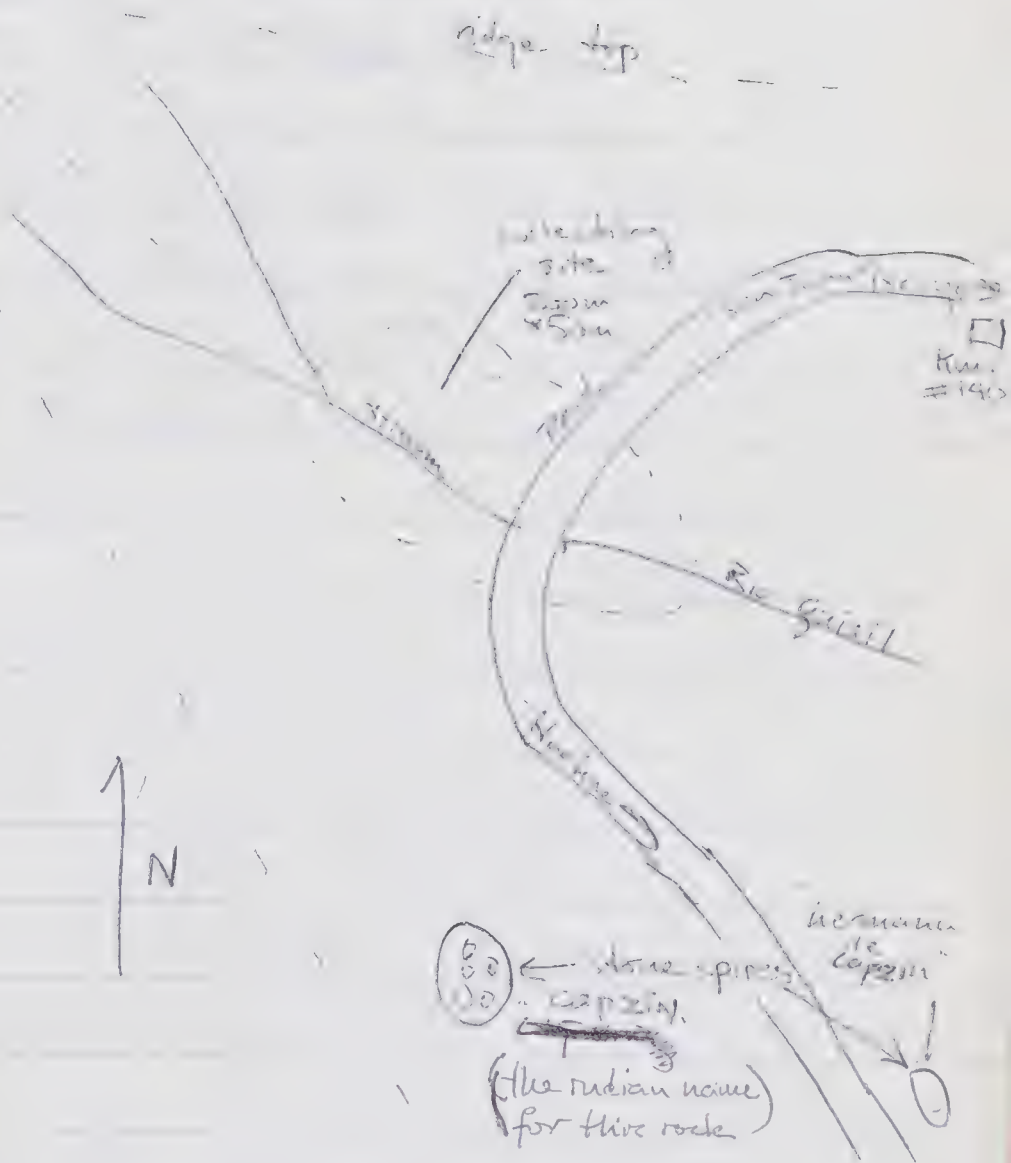
Stopped next several kilometers further on, at a higher altitude in a largely dead pine forest ~~with~~ ^{where} a brook crossed the road. There are deciduous shrubs and grass and moss cover the ground. A rocky area, in fact a major landmark is an enormous stone spine with several trees growing on the top, sticking ~~out~~ straight up from the hillside some 500 yds to the south of the locality and a bit higher ~~on~~ the hill. It is the first such spine seen coming out of San Juan Ixcay, it stands ~~several~~ more than 100m high and probably is 70m thick.



just beyond the big ~~one~~
 one is a smaller one
 below the road (see map)

The locality is most of
 2 kilometer before
 the 140 Km marker
 (San Juan Ixcay is
 at # 152). I
 looked in the same
 habitats as yesterday
 and with the addition
 of along the stream,
 and more under rocks,
 where there were quite
 a few, while I had
 found none under the
 few rocks I turned
 yesterday. I saw three
 of the same lizards

that I collected yesterday, but did not collect them this
 time, no other herps. Collected for two to three hours, density
 of animals was higher. Don't know exactly, but altitude is
~~between~~ well between 2600 and 3200 meters, probably right
 around 2900. Apparently there was a forest fire which killed
 but did not burn ~~up~~ down the trees (Fernando)



- 54-98 : Under logs .
- 99-115 : In ~~near~~ logs.
- 116, 117 : Together under log with eggs. The large one was in a ~~deep~~ depression with the eggs, the small one ~~seemed~~ one or two inches away, it was orange dorsally in life.
- 118-~~124~~ 135- Under stones and bark.
- 136-138 under log 136 seems pregnant, 137 was near eggs
138 was under log with others.
- 139 - Under rotting pine needles in stream

Sept 3 '74. Took the bus this morning to 1 km N of Paquix up on the Sierra de los Cuchumatanes at 28,000 m elev.

I walked a canyon bottom for a while but, though the ground was moist, there was no open water, and no salamanders. It is an open rocky situation with occasional juniperish trees and many large agaves. I collected two male rock lizards there (very Sceloporus). These animals are brilliant iridescent green with similarly bright blue tails and darker the venters and orange chin with black neck ^{patch}.

Then I caught a ride back with a Dutch guy ~~whose~~ who, as it turned out, ran a finca for a Dutch ~~and~~ drug company growing hardenut, ~~and~~ coffee, quinine, etc. He offered me a place to stay there, 25 km. beyond Bamillas, which I readily accepted. So as we drove through San Juan we stopped at the comedor where I had been staying and picked up my ^(my bill for 3 days food, drink, bed was \$5.91) stuff and ~~drove~~ ^{drove} 3 or 4 more hours to the finca. He also told me that there was a guy from Belize collecting snakes and butterflies at the finca for some professor in Mexico. The finca sits right on the edge of the ~~mountains~~, right out the window they drop off into the flats which continue into Yucatan and Peten. The house itself is at 1,100 m. elev., but the finca rises to perhaps 1,800 m. The forest is very lush, big tree ferns all over the place and much uncut forest. The way to get to the finca is to

take the only road out of Bonillas (aside from the one coming in) it is up the hill past the mercado and on the right and ~~is~~ is only passable by 4-wheel drive except when very dry. This goes ~~straight~~ straight into this finca (which is \approx 5,000 acres)

Sept. 4 '74 This morning I moved from the main house of the finca, to the place the Belician collector lives with his wife. It is a small house, a shack by american standards, rough cut planks with cracks between, dirt floor, corrugated tin roof, one room and a kitchen (a sort of annex of worse construction (1" cracks) floor & walls blackened with an adobe wood burning fireplace. Actually a very clean and comfortable place due to its inhabitants. They are great people. He collects ~~but~~ insects, snakes etc. for his godfather, a man who works in the natural hist. mus. in Mexico Df. who also sends them to the British museum and Carnegie ~~Inst~~ Institute. He is small, normal ^{Latin} Indian looking, his name is Kenen Tut. (Tut is Mayan he says) and he went to school through high school, he's now 22 and has been making a living collecting for apparently several years, he's been at this finca two months and stays six more. ~~He~~ He speaks a bit of english but I speak better Spanish so we usually converse in that.

~~Went out~~ Went out and checked some bromeliads with no success, may be too low. Wandered around in forest. Nice green dense woods, but no salamanders.

Sept. 5 The food here is great, and so is the company. Went out again looking around but again nothing. Caught an arboreal frog ~~no more~~ no more. However one man, a guy who is the head of a group of ~~mago~~ ^{red head} ~~magos~~ that there are plenty of "niños dormidos" in the cafetal where his crew is working and ~~he~~ he took a bag with him today and brought back three, of three different types, he overcame his fear that they bite, he's a good guy. Tomorrow I go to his cafetal with him early in the morning.

Sept. 6 Went at 5:30 to the cafetal. It's not planted with coffee yet and they're just digging holes for the coming young trees now. It's just a hillside covered with fallen trees, they were chopped down a year ago Jim told. Salamanders aren't dense, I worked about 4 hours and caught around 8 animals, under logs, and one under bark, all three types. Antonio, the crew head caught ~~six~~ ^{as} eight as well and Jim now offering some of the men in the crew \$5/animal and \$2 if they have broken tails. I hope to get perhaps 100 before I leave. I also ~~the~~ worked up along the forest edge

for $\frac{1}{2}$ hr.

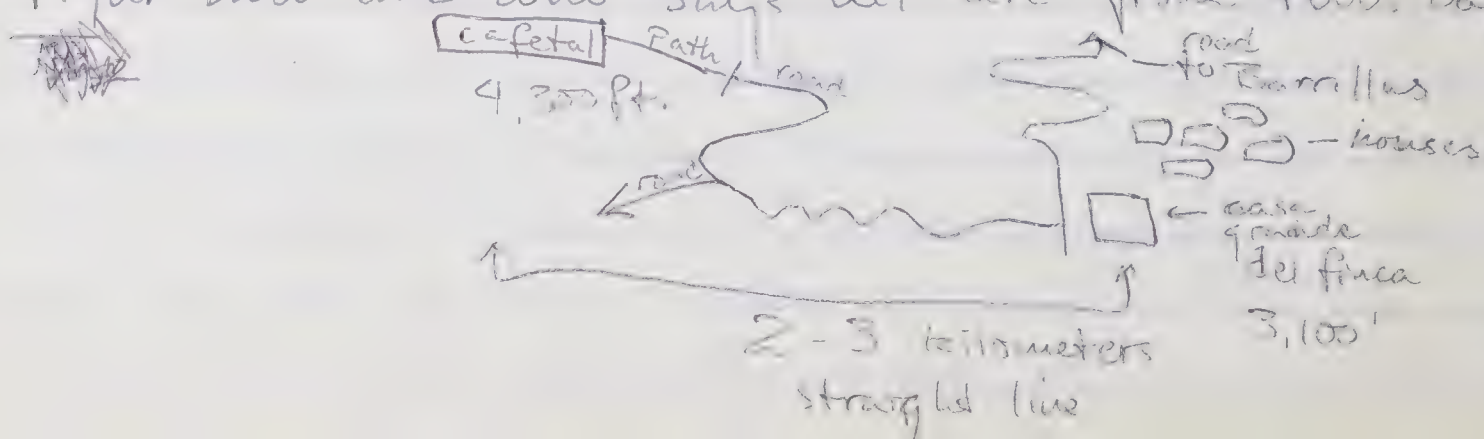
at the top of the field, opening bromeliads, many tadpoles and frog egg masses plus one frog in perhaps 10 lg. (4' leaves) bromeliads and several smaller ones. In the afternoon we came home and I pickled the animals. Also, saw a lg. tarantula in the cafetal. Elevation there is 4,500' Rene says (the Dutchman) 3,100' at the house. A child brought in a large arboreal frog tonight which came into his house (12).

Sept. 7 Went up the road this morning looking for niños dormidos and found none, but in a bananal came upon a coral snake mimic which I took for Renán. Banals have great potential habitat for sala's but none seem to live there. I worked the place quite hard. I also found some small non-spiny bromeliads which had nothing in them.

This p.m. Antonio came in with 14 salamanders from the cafetal, (#70)

Sept. 3 After one more dry run (nearly leaving on a tractor) I finally got off with very fond goodbye to Benin and Comuna. A great stay at the finca although few salamanders. I had better describe the color in life of the salamanders collected here. The species of which I have only three, a large slender animal with long slender legs, very active in life. Black with spots which start as red on the head and grade into pure yellow near midbody. The stocky type with well developed tail and short slender legs with tiny feet is a typical brownish base color with, in many cases, a dark red cast to its dorsum and dorsal portion of tail. This ~~third~~ type is rather lethargic in life. The third is a medium brown, frequently with some slight

indications of dorsolateral lines. No bold patterned, also has well developed legs and is very active in life, one was found under bark on a stump, all other animals from this locality under logs. They seem to occur in similar habitat, although they differ in abundance as seen in proportions in sample, although this is obviously an artificial habitat. I was unable to find any animals in the more normal habitat of the forest. Although I did not collect all of the animals myself, the ten or so I did actually collect, only one were two under the same log, and three were both of the second described type. As for credibility of locality data on purchased specimens, they were all bought from Antonio, who I collected with one day, and who collected there without me the next, for he is a "capporal" who oversees the *moyos* digging in the cafetal, and who works nowhere else right now and who says all are from this cafetal.



So for 75¢ I made it to Barillas, in about 3 hrs. on the top of a truck. Upon arriving I went back to the Hospedaje Terraza where I had stayed before, and got a very nice room. I asked where I could cash a travelers check and was directed to an American missionary family who gladly cashed it for me. I stayed for supper, which was very good and quite american, and talked with the family until quite late. Fine people, never got into religion at all. He said that he'd seen salamanders here, several in recent months, but that they were scarce, we looked around his yard but found nothing. He has backpacked around the entire area (lived in Barillas 18 yrs) and knows a lot about the people, animals and land.

Sept. 9 '74 - Got up early and headed up to a promising ~~forest~~ pine forest I'd seen on the way in last night, from 6:00, till past 7:00 I turned logs and stripped bark, no bromeliads, found nothing but usual ants and 3" grubs. Then went down along the river below town into a cañal and turned leaf litter and stones for

another hour with no success, on the way back for breakfast I stopped by the missionary and he asked some of the men there if they knew of "niños dormidos" the local term, some did but most of these had only ever seen a few. The species here is described as black with white or yellow stripes or lines, this sounds different than anything I've so far encountered.

After breakfast I headed up the blue line road back to the ^{house} ~~place~~ where I'd seen mammal hides before. I found the owner and after a bit of bargaining bought two large hides for 12.50 (for both), and a small squirrel skin was thrown in for good measure. ~~There was on the~~ two hides I bought appear to be ~~grey~~ grey fox, and coati, they are somewhat stiff but have been tanned. I was told that "gordo", fat, was used. There was a third skin there, of a stocky animal about coati size with larger claws, and a very thick skin, which was only dried and was very stiff, it had a definite pattern of dark on light on the neck, and may be some sort of ant-bear or something I don't know.

I then went down to a finca "Rancho Sinaloa" where I was told that there were sometimes one or

two niños to be found, but for over an hour I turned endless banana trash and peeled dead ~~leaf~~ leaves and found nothing. I found two men working and neither knew what a salamander was, so I gave up. Under one banana leaf I saw a large "6" lizard which darted away, but looked like an alligator lizard.

The elevation at Santa Cruz Barillas is stated to be $> 5,600$ ft., ~~that~~ on the sign as you enter town but on my topo map appears to be between 1600 and 1900 m. closer to 1600 but still well below 5600 ft., probably close to 5000.

I worked in the afternoon repacking my specimens (1170 of them) into my new carrier. At first I thought the lg. square plastic formalin bottle would do, but the lag all jumbled and I realized that they might get damaged that way, so I repacked them the way Renán packs snakes, wrapped in bundles in newspaper, and then doused with formalin and put in a plastic bag. But bags are compressible and the animals could be damaged, plus the newspaper disintegrates, plus the bags break and drip formalin. So I decided to find some tall narrow bottles to use, although I realized that bottles can break, and may leak around the cap, especially when second hand, so, I was about

to buy some bottles in the market at Baillus last night, when I spied some baby bottles, plastic, unbreakable, tall and narrow, with tight fitting tops, and the nipple comes without any holes here so it's perfect, ~~the only~~ plus they're not too expensive (\$35). So I bought three and today 2 more, and all the salamanders go perfectly well into three of them. The only potential difficulty is if the formation wrecks the rubber of the nipple, but I think time is on my side for that.

Anyway, about 4:30 one of the missionary's workers, a gardener, showed up ~~with~~ with a ^{big} beautiful flat black bolitoglossine sat. with brown eyes. Its feet are fully webbed, and it is nearly 5" long and very active when handled. It came from beneath a stone in the missionary's yard, next to the house apparently. I wonder if there is a second, marked species, I presume there is and intend to find it.

Sept 10 '74 - Caught the three am. bus up to El Quetzal, waited for dawn and looked around. The woods above the town, what's left of them, are picked clean of logs, so there is little promising habitat. I moved down the road checking the woods from time to time. The woods are sparse and rich I think

anyway they appear very temperate, low deciduous
 trees. I finally tried one path high up the hill
 from the road. They were beautiful. Large rainforest
 hardwoods, with some smaller growth on the shaded
 forest floor, rotting logs strewn everywhere ~~everywhere~~
 large bromeliads abundant, thick moss, everything moist
 and perfect for salamanders. But none are in evidence.
 I worked hard in that forest for more than 3 hrs.
 turning literally hundreds of choice logs, breaking open many
 dozens, and stripping much bark, checking ~~some~~ several
 dozen bromeliads from small to lg. (leaves 3 ft.), all full
 of water and insects but no sign of salamanders, frogs, or
 eggs. I did find two frogs, one under a log and the other
 active. They appear to be the same species. Managed to
 catch an alligator lizard under some stones ~~in~~ in
 a cornfield. I then, after walking the ridge with
 the woods on it towards Barillas, I descended the
 slope into a ~~very~~ very nice pine forest, also strewn with
 stumps and logs, nothing. From there I made my
 way to the road and got back to the hotel at 11:00 am.

Slept this p.m. and bought a pair of mountain
 sticks from the local mountain maker for Jim (Gresser),
 and 4 nice enamel spoons (15¢ each) for Ellen and Mico also
 mailed a letter for Renán. I'm leaving Barillas tomorrow
 and will make one last attempt for sals along the river

tomorrow morning. To hedge my bets as I really want that other piece, I'm giving a baby bottle full of formalin F with a self-addressed tube (to Sam at MVZ) to the missionary, as he says he has seen quite a few on rainy nights in his yard, with a couple of dollars for air mail and I'll tell him just to throw those he finds only in his own yard, into the formalin which will kill them and fix them, they ~~are~~ won't be straight but I'll have some. I'm sure he'll do it as he has become very interested in salamanders due to me, and he's going to do a ten minute spot on his radio station on Sat. (His mission is primarily to run a Indian (4 dialects) and Spanish religious radio station here.).

†† ~~This morning I had my~~
 That previous ~~to~~ a young guy came to the hotel looking for me saying he could catch some minor dormice for me perhaps, and that he had a piece of antique. I bought the stone for \$1 and told him I'd buy animals but that I was leaving at noon tomorrow. The stone is very pretty, and seems to be finer work than the most stones I've. I think it may be real. He says they come from the river.

Sept. 11 - Talked relig. vs. science with the missionary (Bill North, radio man) finally, no problems but no

changes. Heft on the noon bus and stopped near Sta. Eulalia to collect in oak woods (no success). The Km. #194 locality is at the top of the upgrade coming out of San Mateo towards Sta. Eul., it's the first crest with flat or slightly down grade in the pass, and may well be the highest point in that entire pass although there are several subsequent rises, perhaps as high. Thumbed a ride at 4:00 and got to San Juan around 7:00.

12. Caught the 8:00 am bus out of San Juan ⁽⁶¹⁾ and changed at Huehue ⁽⁶²⁾ to Tecpan. Got to Tecpan at around 4:00 pm and found the only handy hotel, a bit more expensive (12 w/o food) in heavy rain which they haven't had for a while (good for murders). Chichovae is a ^{limestone works} ~~staircase factory~~ and lies almost exactly (perhaps 1/2 hr. off) the peak of the pass.

14 - I've found what I suppose is Bolitoglossa morio in the forest above Chichivac, it turns out that Chichivac is a factory where statuary is made, apparently there is a special type of stone there, and they blasted several times today. I thought it was a staircase factory because "calera" sounded like "escalera" to me. The animals were found in the mixed pine and oak woods at the top of the ridge behind the factory in stumps and logs I believe of both tree species, also one individual was found beneath a fallen bromeliad. Schmidt describes morio as having white ^{flecks} ~~spots~~, sometimes fused into stripes and tinged with yellow. By no stretch of the imagination could the markings on today's specimens be considered white or yellow. These ~~vary from~~ all do have tiny white flecks on the venter which extend onto the lower sides in some cases, and the feet, but these ~~are~~ are not the dominant marking and never enlarge. ~~The~~ On the largest light markings are small irregular grey to grey-brown patches ⁽¹⁷⁴⁻¹⁷⁵⁾ on the lower side, but these are so insignificant that at first, before close inspection I considered ^{some of} the animals pure ~~the~~ black-brown. On others there are more dramatic large patches, sometimes

One small individual (#191) has no light markings whatever except for the tiny white flecks (the ~~dark~~ ^{dark grey} enamel got). The others agree with yesterday's. It seems that the abundance of these animals in pine vs. oak is similar, although it is difficult to compare as opening pine stumps is far easier than oak. So far we opened hundreds of stumps, and one section of the ridge, the highest ~~chunk~~ piece, about 200 yds long (very roughly) and down both sides perhaps 150 ft, has been essentially completely covered. Deactivated stumps stand everywhere, there are lots there, and I think the ridge was once lumbered, as ^{nearly} all are now cut, and no trees as big as the largest stumps still stand (up to > 2 ft. diam. (the stumps)).

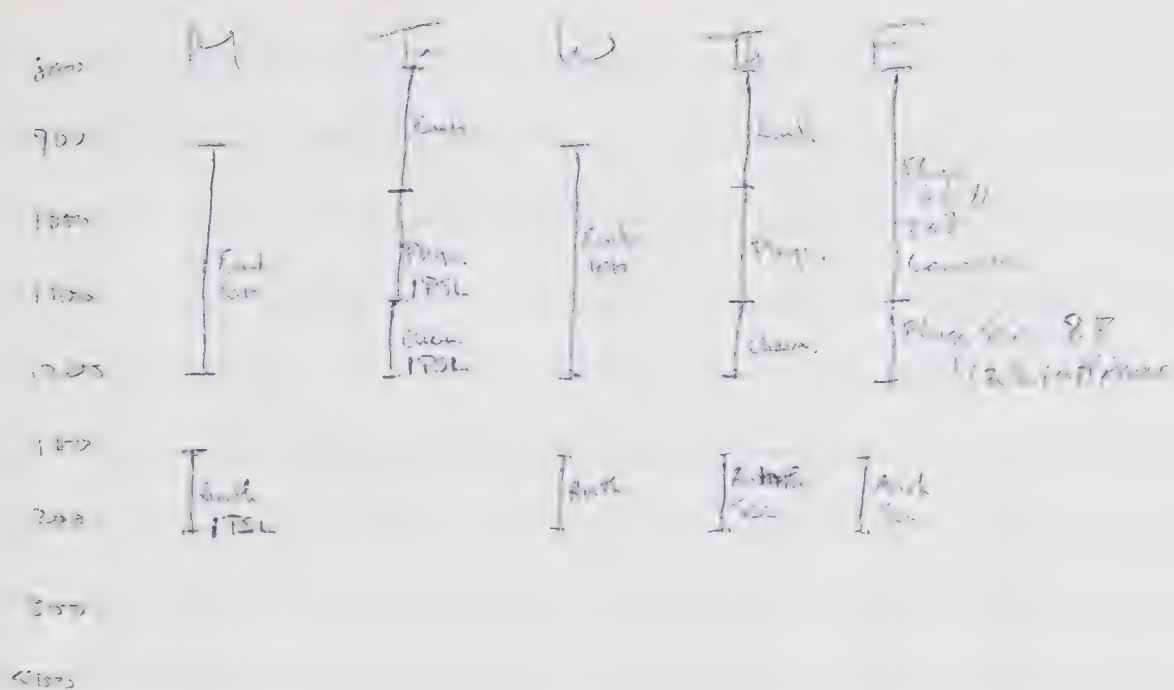
Tonight I went and fixed (Cuba Libre).

16 Hung over, went to Nahuatán. a bought jacket etc.

17 Rode to Pochután (\$3)

18 Collected this morning, got ~~two~~ ^{three} specimens from 40-50 bromeliads, the larger individual was found actually crawling on the forest floor but it was ~~at~~ on the spot where I'd just

dropped a bracketed and I believe he came from there. The locality is \pm 2 km S. of town near the road as it pulls up ~~over~~ the side of the valley, below the road near the river



Prop. 10

Anthro. 2

Chem. 3

Exib. 8

Thurs. 9 12

Mon. 1:30-4:30

Mon. 7-10

Wed. 1:30-4:30

~~and told to me once~~

SPECIMENS

25 viii 74

1) "Cantil", Crotonidace

" " "

2) Thamnopis sp.

31. viii. 74

3 / Bombagossine sal. (see pp 9-13)

4 /

5 /

6 /

7 /

8

9

10

11

12

13

Anquid lizard, ♀

14

"

"

♂

15

Bufo sp. ♂

16

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17

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"

#

Volcán de Agua, 2580 meters elev.
on the trail up the volcano from Sta. María de Jesús
Sacatepéquez, Guatemala

"

"

"

"

"

All same as above

197

Kilometer ~~196~~ Huehuetenango - Barillas road 3,000m
elev, Huehuetenango, Guatemala

"

"

"

"

"

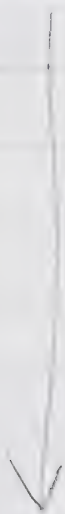
"

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31. viii. 74

18

Bolitaeglossine sals.

(see pp 9-13)

"

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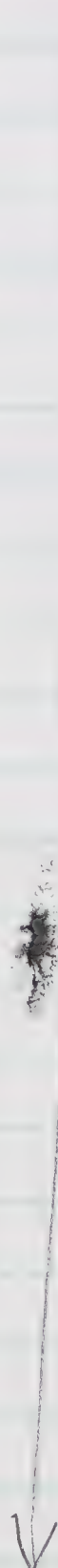
38

39

40

~~40~~ 41

42



197
Km. # ~~1965~~, Barriles - Huehuetenango rd., 3,500 meters,
Huehuetenango, Guatemala.

"

V

31. viii. 74

"



43

44

45

46

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49

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53

Anguid Lizard

Bolitoglossine sal.

"



(see pp 9-13)



2. ix. 74

"



54

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64

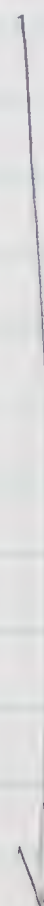
65

66

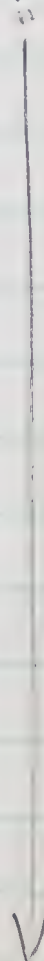
67

Bolitoglossine salamanders


"




(see pp 14-16)



¹⁹⁷
Km. # ~~165~~, Huehuetenango - Barillas rd., 3,000 meters, Huehuetenango,
Guatemala.



Rio Guisil where it crosses at Huehuetenango - Barillas rd.
nr. Km # 140, Huehuetenango, Guatemala.



2. ix. 74	68	Bolitoglossine sals.	(see pp. 14-16)
"	69		"
	70		
	71		
	72		
	73		
	74		
	75		
	76		
	77		
	78		
	79		
	80		
	81		
	82		
	83		
	84		
	85		
	86		
	87		
	88		
	89		
	90		
	91		
	92		

Rio Guisil at Huehuetenango-Barillas rd.
nr. Km # 140. Huehuetenango, Guatemala



Z. ix. 74

93

Bolitoglossine sals.

(see pp. 14-16)

94

95

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111

112

113

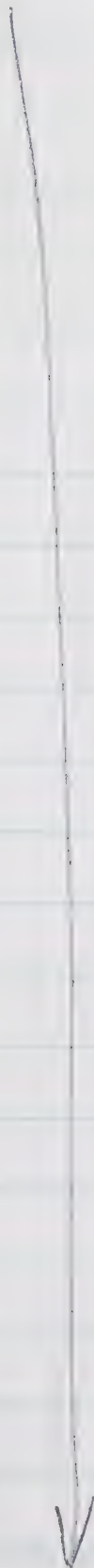
114

115

116

117

Rio Quisil at Huehuetenango-Barillas rd.
nr. Km. # 140, Huehuetenango, Guatemala



2. ix. 74 118 Bolitoglossine salis (see pp. 14-16)

"

119

"

"

120

121

122

123

124

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128

129

130

131

132

133

134

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136

137

138

139

V

V

V

3. ix. 74

140

Guano lizard ♂

(See p. 17)

141

" " "

6. ix. 74

142

Bolitoglossine salis

(See pp. 19-~~20~~²²)

Rio Quisú at Huehuetenango-Barillas rd., nr. Km. #140
Huehuetenango, Guatemala


V

1 Km NW Paquix, Huehuetenango ~~to~~ Barillas rd.,
Huehuetenango, Guatemala.

Finca Chiblae, ± 15 m N. E. Barillas, elev. $\approx 4,300^{\pm}$ m

6. ix. 74	143	Bolitoagutrine sals.	(see pp 19-22)
↓	144	↓	↓
	145		
	146		
	147		
	148		
	149		
7. ix. 74	150		
↓	151		
	152		
	153		
	154		
	155		
	156		
	157		
	158		
	159 15		
	160		
	161		
	162		
	163		
	164		
	165		
	166		
✓	167	↓	↓

Finca Chiblac, \approx 15 Km. N.E. Barillas, Huehuetenango
Guatemala, elev. ~~4,350 m~~⁺ 4,300 ft.



7. ix. 74	168	<u>Bolitoglossa</u> <u>salis</u>	(see pp 17-22)
↓	169	↓	↓
	170		
	171		
	172		
9 ix ix. 74	173	"	(see p. 26)

14. ix. 74	174	<u>Bolitoglossa</u> <u>murio</u>	(see pp. 29-32)
↓	175	↓	
	176		
	177		
	178		
	179		
	180		
↓	181	↓	
15. ix. 74	182	"	
↓	183	↓	
	184		
	185		
	186		
	187		
	188		
	189		
	190		
↓	191	↓	

Finca Chiblac, ≈ 15 km N.E. Barillas, elev. 4,300 ft.,
Huehuetenango, Guatemala.



† Santa Cruz Barillas, elev. 1400-1500 m
Huehuetenango, Guatemala.

Chichavie, Km #94 Pan Am. highway,
Guatemala



10. ix. 74 192

" 193

5. ix. 74 194

6. ix. 74 195

196

197

(see pp 26, 27)
"

Top of ridge above Banllas, Huehuetenango,
Guatemala.

Finca Chiblac, $\frac{1}{2}$ K S. main house, Huehueten-
ango, Guatemala. elev. 1,100 m.

Finca Chiblac, cafetal, 4,300 ft. elev.

~~#~~ Huehuetenango, Guatemala.

2 Km. Parulhá, Baja Verapaz,
Guatemala



8
 7
 6
 5
 4
 3
 2

M I
 L I
 Th I
 F I

Emb
 Phys

Emb
 Phys

I Gen
 I Gen
 I Gen
 I Gen

Anth.
 Anth.
 Anth.
 Anth.

Gen s.

$$\begin{array}{r}
 \$135.00 \\
 - 48.35 \\
 \hline
 86.65
 \end{array}$$

total used for gifts

53.75 - food + lodging
11.75 - bus fare
65.50
+ 10.00 - misc. ~~for~~ needs
+ 5.00 - misc. travel
80.50
- ~~86.65~~
~~38.85~~
mid. bus
86.65
- 80.50
6.15 ~~transport~~

to be paid by
Museum.

unaccounted for
(not worried about)

Tecpan
2000
1000
1000

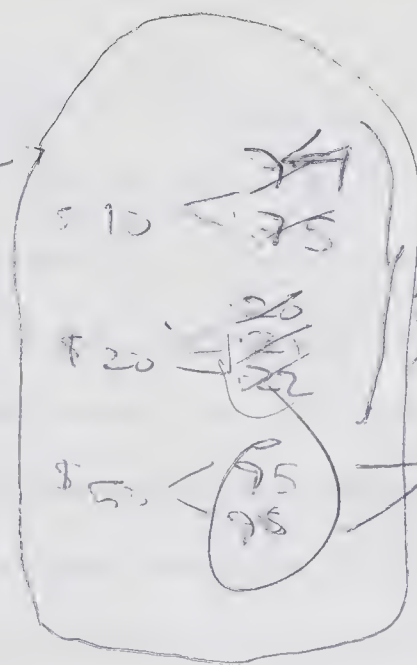
Finances, after padron
\$ 15 - started
\$ 10 - Renán
\$ 10 - Bill Veith
\$ 20 - " "

2 \$ 55 Airports

Jacket - 10.00
weaving - 3.00
cloth - 9.50
coffee - 3.00
trinket (head) 1.50
Jades - 9.00
band. - 2.50
cueros - 2.50
marimba stick - 75
spoons - 60
tablecloth - 4.00
stone - 1.00

~~60 60~~

46.35 - regalos



~~80~~
55
135

Airports

135.00
~~46.35~~
88.65

²⁴⁹
135.00
- 46.35
88.65
128.65
~~100.00~~

~~88.65~~
128.65

Chiblae	Cotán	Tecpan
10.00	2.50	14.25
	1.00	4.00
	2.50	3.00
	6.00	21.25

Barillas
2.50
8.00

Plugs

01/7/62
21/7/62
11/8/62

Results
Sat. Lab. report

Buses	Notes off Bus #	
2/75	3 6.00	} S.V.
1.40	1.50	
1.20	1.50	
1.80	2.50	} S.C.B.
1.30	7.50	
1.00	1.00	} Ch.
1.00		
1.20	14.25	} Teefer
1.00	7.00	
2.00		} Quate
.50	1.00	
14.75	2.50	} Purchase
	50.75	
	11.75	
	62.50	

~~62.50~~ ~~62.50~~ ~~62.50~~

Phys 60
205 Lec.
9-4

3) TuTh 9:30-12:30 10
2) MW 7-12
72.50

Embryo MW 9-12
Physics TuTh 9-11
or ~~Physics~~
Genetics M Tu WF 12
Chem TuTh 11
MW 10

Anthrop MW 1-4
Genetics M Tu WF 12
Tu 2
Dave Thu 2
Fri 10
700 TuTh 10
115 MW 9-4

15

22

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set

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have

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15

22

